Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

-2-

Listing of Claims:

1. (Currently amended) Method for determining [[the]] <u>a</u> contour of a recess in a piece of material, which <u>recess</u> is worked into the material by means of a tool, <u>in particular in a piece of bone, wherein the comprising:</u>

establishing a position of the piece of material in space is established by a navigation system,

establishing a [[the]] position of the tool in space is established by [[a]] the navigation system,

determining [[the]] a respective position of the tool in relation to the piece of material is determined from [[the]] position data obtained in this manner by the navigation system,

storing, during [[the]] machining of the piece of material with the tool to prepare the contour of the recess, [[the]] relative positions of the tool in relation to the piece of material, are stored and

<u>determining</u> the prepared contour <u>of the recess</u> on the piece of material <u>is determined</u> from extreme values of <u>these</u> <u>the</u> relative positions with respect to a fixed reference position of the piece of material.

- 2. (Original) Method according to Claim 1, wherein the prepared contour is visually displayed.
- 3. (Currently amended) Method according to Claim 1, wherein [[the]] differences of the <u>prepared</u> contour of the <u>prepared</u> recess <u>determined in this manner</u> from a predetermined contour is determined at different locations of the <u>prepared</u> contour.

4. (Currently amended) Method according to Claim 3, wherein the differences determined in this manner at different locations of the prepared recess contour are visually displayed.

- 5. (Currently amended) Method according to Claim 4, wherein the same differences at different locations of the prepared recess contour are displayed in the same manner.
- 6. (Currently amended) Method according to Claim 5, wherein the same differences are displayed in the same eolour color.
- 7. (Currently amended) Method according to Claim 2, wherein an image of the piece of material is superposed on [[the]] an image of the prepared contour of the recess or an image of [[the]] detected differences between a predetermined contour and the prepared contour.
- 8. (Currently amended) Method according to Claim 5, wherein an image of the piece of material is superposed on [[the]] an image of the prepared contour of the recess or an image of [[the]] detected differences between the predetermined contour and the prepared contour.
- 9. (Currently amended) Method according to claim 1, wherein from the determined extreme values of the relative position, a warning signal is generated when these the extreme values exceed specific given maximum values.
- 10. (Currently amended) Device for determining [[the]] a contour of a recess in a piece of material, comprising: [[with]]

a tool for working the contour into the piece of material,

marking elements connected to wherein the piece of material and the tool are respectively firmly connected to a marking element a stationary navigation system is provided,

<u>a stationary navigation system for establishing respective</u> which establishes the positions of the two marking elements and thus [[the]] <u>a</u> position of the piece of material and [[the]] <u>a</u>

Serial No.: 10/632,693

position of the tool in space,

an arithmetic unit with memory is provided, which from [[the]] position data obtained from the navigation system, in this manner determines [[the]] a respective position of the tool in relation to the piece of material, stores [[the]] relative positions of the tool in relation to the piece of material during machining of the piece of material by the tool to prepare the contour of the recess, and determines the prepared contour of the recess on the piece of material from extreme values of these the relative positions with respect to a fixed reference position of the piece of material.

-4-

- 11. (Original) Device according to Claim 10, wherein a display device is provided which visually displays the prepared contour.
- 12. (Currently amended) Device according to Claim 10, wherein the arithmetic unit with memory determines [[the]] differences of the <u>prepared</u> contour of the <u>prepared</u> recess determined in this manner from a predetermined contour at different locations of the <u>prepared</u> contour.
- 13. (Currently amended) Device according to Claim 12, wherein the arithmetic unit with memory visually displays the differences determined in this manner at different locations of the prepared recess contour.
- 14. (Currently amended) Device according to Claim 13, wherein the arithmetic unit with memory displays the same differences at different locations of the prepared recess contour in the same manner.
- 15. (Currently amended) Device according to Claim 14, wherein the arithmetic unit with memory displays the same differences in the same eolour color.
- 16. (Currently amended) Device according to Claim 10, wherein the arithmetic unit with memory

superposes an image of the piece of material on [[the]] <u>an</u> image of the <u>prepared</u> contour of the recess or <u>an image</u> of [[the]] detected differences between a <u>predetermined contour and the prepared contour</u>.

17. (Currently amended) Device according to Claim 12, wherein the arithmetic unit with memory superposes an image of the piece of material on [[the]] an image of the prepared contour of the recess or an image of [[the]] detected differences between the predetermined contour and the prepared contour.

18. (Currently amended) Device according to Claim 10, wherein from the determined extreme values of the relative position, the arithmetic unit with memory generates a warning signal when these the extreme values exceed specific given maximum values.